

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims:

1. (Currently Amended) A method of strengthening the near well bore region of a subterranean formation comprising the steps of:
 - (a) isolating a zone of interest along a well bore;
 - (b) hydrajetting at least one slot a plurality of slots substantially uniformly around the circumference of the well bore in the zone of interest;
 - (c) filling the slot at least one of the slots with a consolidation material wherein the viscosity of the consolidation material is sufficient to enable the consolidation material to penetrate a distance into the formation; and[[,]]
 - (d) allowing the consolidation material to substantially cure.
2. (Original) The method of claim 1 wherein the consolidation material comprises a resin.
3. (Original) The method of claim 2 wherein the resin consolidation material comprises a hardenable resin component comprising a hardenable resin and a hardening agent component comprising a liquid hardening agent, a silane coupling agent, and a surfactant.
4. (Currently Amended) The method of claim 3 wherein the hardenable resin in the liquid hardenable resin component is an organic resin comprising selected from the group consisting of bisphenol A-epichlorohydrin resin, polyepoxide resin, novolak resin, polyester resin, phenol-aldehyde resin, urea-aldehyde resin, furan resin, urethane resin, glycidyl ethers, ~~or~~ and mixtures thereof.
5. (Currently Amended) The method of claim 3 wherein the liquid hardening agent in the liquid hardening agent component comprises is selected from the group consisting of amines, aromatic amines, aliphatic amines, cyclo-aliphatic amines, piperidine, triethylamine, benzyldimethylamine, N,N-dimethylaminopyridine, 2-(N₂N-dimethylaminomethyl)phenol, tris(dimethylaminomethyl)phenol, ~~or~~ and mixtures thereof.
6. (Currently Amended) The method of claim 3 wherein the silane coupling agent in the liquid hardening agent component comprises is selected from the group consisting of N-2-

(aminoethyl)-3-aminopropyltrimethoxysilane, 3-glycidoxypropyltrimethoxysilane, n-beta-(aminoethyl)-gamma-aminopropyl trimethoxysilane, and ~~or~~ mixtures thereof.

7. (Currently Amended) The method of claim 3 wherein the surfactant in the liquid hardening agent component ~~comprises~~ is selected from the group consisting of ethoxylated nonyl phenol phosphate ester, mixtures of one or more cationic surfactants, a C₁₂ – C₂₂ alkyl phosphonate surfactant, one or more non-ionic surfactants and an alkyl phosphonate surfactant, ~~or~~ and mixtures thereof.

8. (Currently Amended) The method of claim 3 wherein the resin consolidation material is a furan-based resin ~~comprising~~ selected from the group consisting of furfuryl alcohol, a mixture furfuryl alcohol with an aldehyde, ~~a mixture~~ mixtures of furan resin and phenolic resin, ~~or~~ and mixtures thereof.

9. (Currently Amended) The method of claim 3 wherein the resin consolidation material further comprising comprises a solvent ~~comprising~~ selected from the group consisting of 2-butoxy ethanol, butyl acetate, furfuryl acetate, ~~or~~ and mixtures thereof.

10. (Currently Amended) The method of claim 2 wherein the resin consolidation material is a phenolic-based resin ~~comprising~~ selected from the group consisting of terpolymer of phenol, phenolic formaldehyde resin, ~~a mixture~~ mixtures of phenolic and furan resin, ~~or~~ and mixtures thereof.

11. (Currently Amended) The method of claim 10 wherein the resin consolidation material further comprising comprises a solvent ~~comprising~~ selected from the group consisting of butyl acetate, butyl lactate, furfuryl acetate, 2-butoxy ethanol, ~~or~~ and mixtures thereof.

12. (Currently Amended) The method of claim 2 wherein the resin consolidation material is a ~~High-temperature~~ epoxy-based resin ~~comprising~~ selected from the group consisting of bisphenol A-epichlorohydrin resin, polyepoxide resin, novolac resin, polyester resin, glycidyl ethers, ~~or~~ and mixtures thereof.

13. (Currently Amended) The method of claim 12 wherein the resin consolidation material further comprising comprises a solvent ~~comprising~~ selected from the group consisting of dimethyl sulfoxide, dimethyl formamide, dipropylene glycol methyl ether, dipropylene glycol dimethyl ether, dimethyl formamide, diethylene glycol methyl ether, ethylene glycol butyl ether, diethylene glycol butyl ether, propylene carbonate, ~~d-limonene~~ d-limonene, fatty acid methyl esters, ~~or~~ and mixtures thereof.

14. (Original) The method of claim 1 further comprising, after step (d), the step of:
 - (e) hydraulically fracturing the zone of interest.
15. - 29. (Canceled)